

Amendments to the Specification

Please replace paragraph [0014] with the following amended paragraph:

[0014] In a preferred embodiment, the capillary matrix is composed of a material different from the material comprising the lateral flow chromatography strip or the receiving area or sample pad of such a strip. The capillary matrix is composed of a material such that saturation of the capillary matrix with an oral fluid does not substantially alter the morphology of the capillary matrix. Thus, neither the average pore size nor the void volume of the capillary matrix is substantially altered. In addition, the volume of the capillary matrix is substantially constant. Saturation of the capillary matrix typically effects less than less than 30%, preferably less than 25%, more preferably less than 20% and most preferably less than about 15%, 10%, 5% or less than about even 1%. The capillary matrix preferably has an average pore size ranging from about 40 μm to about 250 μm , more preferably from about 60 μm to about 200 μm , and most preferably from about 80 μm to about 120 μm and a void volume of less than about 60 $\mu\text{L}/\text{cm}^3$. Particularly preferred porous matrix materials have pore sizes that range from about 45 $\mu\text{L}/\text{cm}^3$ to about 90 $\mu\text{L}/\text{cm}^3$, from about 90 $\mu\text{L}/\text{cm}^3$ to about 130 $\mu\text{L}/\text{cm}^3$, or from about 80 $\mu\text{L}/\text{cm}^3$ to 120 $\mu\text{L}/\text{cm}^3$. Preferred capillary matrix materials are plastics (e.g., porous matrices of a high density polyethylene (HDPE), an ultra-high molecular weight polyethylene (UHMW), a polypropylene (PP), a polyvinylidene fluoride (PVDF), a polytetrafluoroethylene (PTFE), a nylon 6 (N6), or a polyethersulfone (PES)). The plastics may be hydrophilic or treated (e.g., with a surfactant such as sodium N-methyl cocoyl taurate) to be hydrophilic.

Please replace paragraph [0015] with the following amended paragraph:

[0015] In a preferred embodiment, the capillary matrix, when contacted to an oral mucosa takes up oral fluid from the oral cavity and readily releases the oral fluid to the receiving area of the lateral flow chromatography strip in under about 1 minute without compression, altered air or fluid pressure, or other manipulation of the matrix material. The deliver comprises about 100 μL to about 200 μL of oral fluid delivered to the lateral flow chromatography strip in under about 1 minute. The capillary matrix, when contacted to an oral mucosa takes up oral fluid from the oral cavity and releases the oral fluid to the receiving area of the lateral flow chromatography strip preferably in under about 30 seconds. Under these conditions, the capillary matrix, is preferably saturated with oral fluid in under about 1 minute, and saturation typically utilizes less than about 500 μL of oral fluid. Generally speaking, the capillary matrix will released sufficient oral fluid to saturate the receiving area of the chromatographic strip.

Please replace paragraph [0049] with the following amended paragraph:

[0049] The matrix itself must be of relatively small dimension. Specifically, the interstices is preferably of a dimension where capillary forces cause the fluid to be drawn into the capillary matrix. Thus, the capillary matrix is also selected to have an average pore size small enough to

provide rapid uptake of the oral fluid with which it is contacted (e.g., via capillary action). The small pore size also functions to exclude particulate material present in the fluid sample. The pore size, however, is also selected to be large enough that the viscous oral fluid does not clog the capillary matrix and instead rapidly transports through the matrix to the lateral flow chromatography pad. Preferred materials have an average pore size that ranges from about 40 μm to about 250 μm , more preferably from about 60 μm to about 200 μm , and most preferably from about 80 μm to about 120 μm .

Please replace paragraph [0060] with the following amended paragraph:

[0060] Particularly preferred porous matrix materials are Porex X-4588, 80-120 μm pore size at 0.024 inches of thickness made from polypropylene. Likewise, Porex X-4903 at 0.0.0625 inches, pore size 45-90 μm , and Porex X-4913 at 0.0625, pore size 90-130 μm are suitable. In one preferred embodiment, these materials are treated with sodium N-methyl cocoyl taurate. The capillary matrix materials are soaked in the detergent which is then dried onto the surface comprising the porous matrix.